

State of Louisiana Coastal Protection and Restoration Authority

2017 Annual Inspection Report

for

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration

State Project Number BA-35 Priority Project List 11

March 23, 2018 Plaquemines Parish

Prepared by:

Barry Richard, P.E. Coastal Protection and Restoration Authority New Orleans Regional Office CERM, Suite 309 2045 Lakeshore Drive New Orleans, LA 70122



2017 Annual Inspection Report for

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35)

Table of Contents

I.	Introduction	on	.1					
		escription and History						
Ш.	Inspection	Purpose and Procedures	. 1					
IV.	Inspection	Results	.2					
V.	Conclusion	ns	.2					
VI.	Recomme	ndations	.3					
	Immediate	Repairs	.3					
	Programm	ed Maintenance	.3					
		Appendices						
Ap	pendix A	Project Features Map						
Ap	pendix B	Photographs						
Ap	Appendix C Three Year Budget Projections							



Appendix D Field Inspection Form



I. Introduction

The Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) project area is located between Pass Chaland and Grand Bayou Pass and separates Bay Joe Wise from the Gulf of Mexico. The project area is located in Plaquemines Parish.

II. Project Description and History

The Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) consists of nourishing and rebuilding the shoreline with sediment to create a beach berm, dune, and a back-barrier marsh platform. The wetlands, dune, and swale habitats within the project area have undergone substantial loss due to oil and gas activities, subsidence, sea-level rise, and marine and wind-induced shoreline erosion. Marine processes acting on the abandoned deltaic headlands and barrier islands rework and redistribute the previously deposited sediment. In these areas along the shoreline, there are several locations where the shoreline has receded and decreased to a critical width that is susceptible to breaching during storms.

Construction of the Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) was completed in July 2009. No operations and maintenance projects have been completed to date.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, the OCPR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C.

A visual inspection of the Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) was not held this year. Instead it was agreed by CPRA and NOAA that observations would be made viewing the latest Google Earth Imagery. This imagery, taken on November 20, 2016, is included in Appendix B of this report.





IV. Inspection Results

Sand Fence

Approximately 14,360 linear feet of sand fencing was installed during project construction. This structure appears to have been removed by Hurricane Isaac, however due to the vegetation it does not need to be replaced at this time.

Containment Dike

It appears this structure has almost completely degraded in the bay but remains intact along the small stretch outside of the bay. Some erosion appears to have encroached on the marsh platform along a few stretches.

Settlement Plates

The settlement plates were not inspected at this time.

Vegetative Plantings

The project has vegetated nicely over the years.

V. Conclusions

The project is performing as designed. Based on visual inspections and aerial imagery the shoreline is retreating. The majority of this was caused by the landfall of Hurricane Isaac in 2012. Thick vegetation is evident on the island and is performing the job of sediment retainage. This shoreline retreat will continue to be observed visually and through regular surveys. If necessary, more sand fencing or vegetative plantings will be used to maximize sediment retainage through the 20-year life of the project.

VI. Recommendations

It is recommended not to perform any maintenance work at this time.

Immediate Repairs

• None at this time.

Programmed Maintenance

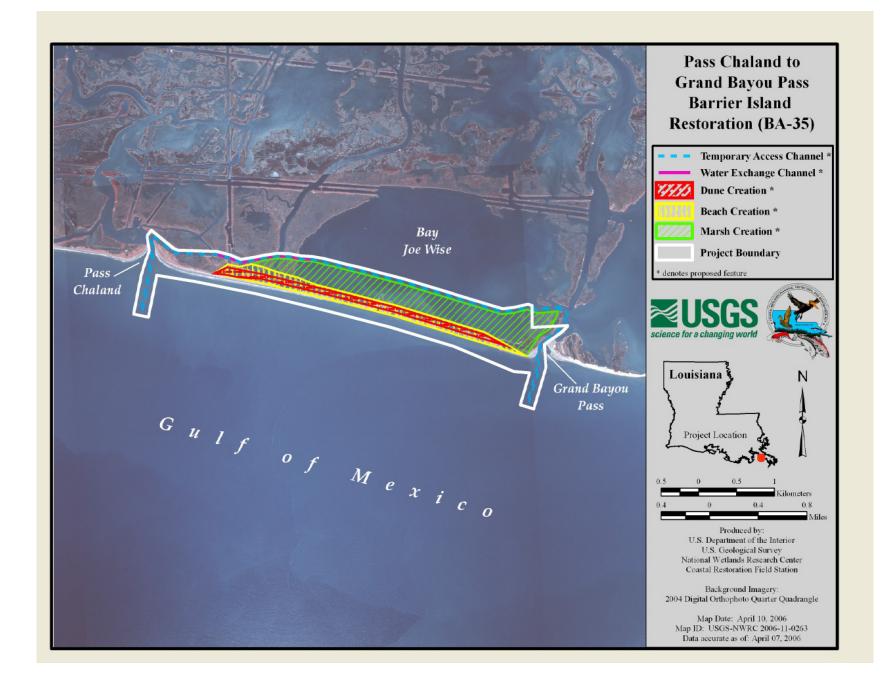
No Programmed Maintenance is recommended at this time.





Appendix A

Project Features Map



Appendix B

Photographs



Photo #1 - Full Project Area.



Photo #2 – West End Beach and Dune Vegetation.



Photo #3 – East End Beach and Dune Vegetation.



Photo #4 – West End Marsh and Containment Dike Degradation.



Photo #5 – East End Marsh and Containment Dike Degradation.

Appendix C

Three Year Budget Projection

Pass Chaland to Grand Bayou Pa	ss Barrier Sho	reline Resto	ration (BA-35)																		
Federal Sponsor: NMFS			•																			
Construction Completed : June 11	, 2009																					
PPL#11																						
	Year O	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7	Year-8	Year-9	Year-10	Year-11	Year-12	Year-13	Year-14	Year-15	Year-16	Year - 17	Year -18	Year-19	Project Life	Currently
Current Approved O&M Budget	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	Budget	Funded
State O&M	\$854,975	\$535,594	\$1,010,438	\$4,561	\$4,656	\$4,754	\$4,854	\$224,790	\$5,060	\$5,166	\$5,275	\$5,386	\$5,499	\$5,614	\$259,991	\$5,852	\$5,975	\$6,101	\$6,229	\$6,360	\$2,967,130	\$2,410,224
Corps Admin	\$2,356	\$819	\$836	\$853	\$871	\$890	\$908	\$927	\$947	\$967	\$987	\$1,008	\$1,029	\$1,050	\$1,072	\$1,095	\$1,118	\$1,141	\$0	\$0	\$18,874	\$5,739
Federal S&A	\$17,365	\$11,548	\$19,166	\$1,169	\$4,277	\$1,219	\$1,245	\$4,178	\$1,297	\$4,487	\$1,352	\$1,381	\$1,410	\$1,440	\$4,832	\$1,501	\$1,532	\$1,564	\$1,597	\$5,768	\$88,328	\$53,529
Total																					\$3,074,332	\$2,469,484
																					Remaining	Current 3 year
Projected O&M Expenditures																					Project Life	Request
Maintenance Inspection			\$4,208	\$4,296	\$4,380	\$4,468	\$4,556	\$4,648	\$4,742	\$4,837	\$4,934	\$5,032	\$5,133	\$5,236	\$5,340	\$5,447	\$5,556	\$5,667	\$5,780	\$6,257	\$63,960	
General Maintenance			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. ,	. ,	. ,	. ,	. ,	- ,	. ,	. ,	,		,	,	4-,	,	. ,	,	,	\$0	
Structure Operations																					\$0	
Corps Admin			\$836	\$853	\$871	\$890	\$908	\$927	\$947	\$967	\$987	\$1,008	\$1,029	\$1,050	\$1,072	\$1,095	\$1,118	\$1,141	\$0	\$0	\$10,414	\$2,901
Federal S&A			\$19,166	\$1,169	\$4,277	\$1,219	\$1,245	\$4,178	\$1,297	\$4,487	\$1,352	\$1,381	\$1,410	\$1,440	\$4,832	\$1,501	\$1,532	\$1,564	\$1,597	\$5,768	\$28,161	\$7,136
State S&A			\$195,959					\$75,846							\$87,138						\$87,138	\$0
Construction:			\$481,790					\$161,230							\$161,230						\$161,230	\$0
Professional Services:																					\$0	\$0
E&D																					\$0	\$0
Surveying			\$4,218																		\$0	\$0
Construction Administration																					\$0	\$0
Inspection																					\$0	\$0
Total	\$0	\$0	\$706,177	\$6,318	\$9,528	\$6,577	\$6,709	\$246,829	\$6,986	\$10,291	\$7,273	\$7,421	\$7,572	\$7,726	\$259,612	\$8,043	\$8,206	\$8,372	\$7,377	\$12,025	\$350,903	\$24,549
O&M Expenditures from COE Report \$479,322				Current O&M Budget less COE Admin \$2,463					\$2,463,749		Current Project Life Budget less COE Admin 9						\$3,055,458					
State O&M Expenditures not submitted for in-kind credit \$0						Remaining Available O&M Budget \$1,984,42					\$1,984,427		Total Projected Project Life Budget						\$830,225			
Total Estimated O&M Expenditures (as of August 2017) \$479,322					Incremental Funding Request Amount for Current 3 Year: -\$1,959,878							Project Life Budget Request Amount					-\$2,225,233					

Appendix D

Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No./Name: (BA-35) Pass Chaland to Grand Bayou Pass Restoration Date of Inspection: 11/20/2016 Time: N/A

Structure No. n/a Inspector(s): CPRA

Structure Description: n/a Water Level N/A

Type of Inspection: Annual Weather Conditions: N/A

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Sand Fencing	Poor				No sign of any fencing remaining.
Containment Dike	N/A				Degraded
Settlement Plates	Fair				Did not inspect
Plantings	Good				Appear to be doing well.
_					